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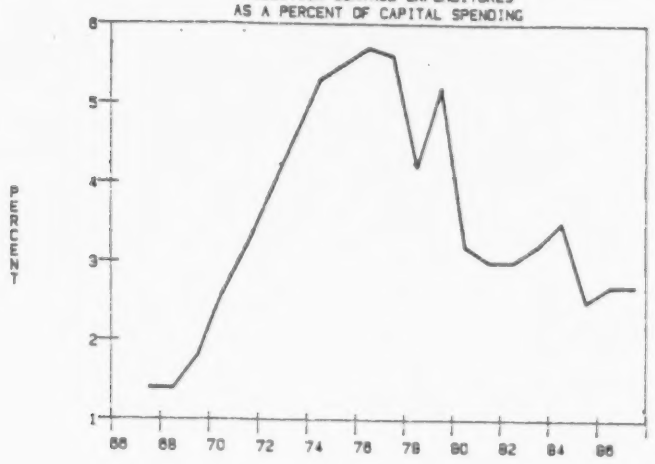
19th ANNUAL MCGRAW-HILL SURVEY OF POLLUTION CONTROL EXPENDITURES, 1985-1987

Pollution control capital spending by U.S. business in 1986 is expected to receive a hearty 8.5% shot in the arm this year (Table I)-- despite projections that overall capital spending is heading for a fall. Nevertheless, coming on the heels of a 10.3% spending crash in 1985, U.S. business plans for $10.4 billion of pollution control expenditures in 1986 represent a cyclical upswing in spending rather than a sustainable growth trend.

In fact, even with the 0.5% decline in 1986 capital spending projected by McGraw-Hill's "Annual Spring Survey of Plant and Equipment Expenditures", pollution control capital spending amounts to only 2.7% of the total (Table II). That's up from 2.5% in 1985, but it still is one of the lowest historical percentages of capital spending on record (Table VI). And if plans for pollution control spending for 1987 pan out, the doldrums will continue as firms keep anti-pollution spending steady both in dollar terms and as a percent of overall capital spending.

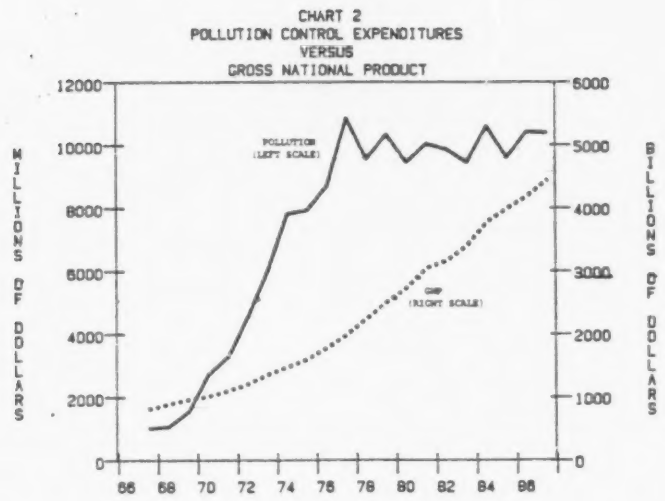
These are some of the key findings of the "19th Annual McGraw-Hill Survey of Pollution Control Expenditures." The results, tabulated in March and April, were drawn from over 400 companies that responded to an overall capital spending survey. Dollar figures have been adjusted to represent spending by all U.S. business.

CHART 1
POLLUTION CONTROL EXPENDITURES
AS A PERCENT OF CAPITAL SPENDING



U.S. business' spending on pollution control this decade has shifted dramatically from the boom spending years of the seventies. Consider this: From 1970 through 1979, expenditures on pollution control plant and equipment exploded at an average annual rate of 16%, or nearly 8% after inflation. But from 1980 through 1985, annual growth rates plunged to 0.3% representing "real" declines of 3% per annum. Charts 1 and 2 clearly illustrate the declining significance of pollution control spending both as a percentage of total capital spending and when compared to growth in the overall economy in the eighties.

Marked differences between the current legislative atmosphere and that of the seventies accounts for much of this stagnation in pollution control capital spending by overall U.S. business. All the major environmental bills in effect today such as the Clean Air Act and the Clean Water Act were enacted in the seventies; and for the most part, expenditures by business to conform to these Environmental Protection Agency standards have already been made. Conservative politics in the eighties has been more concerned with clearing the air of government regulation and red tape rather than of pollutants, hence



the government's reluctance to burden business with further legislation.

Government non-interventionist ideas aside, pollution control expenditures by U.S. industry may be on the downslide because the nature of today's environmental issues differ substantially from those of the previous decade; hence the implications for public policy and for the flow of pollution control dollars are much different. For example, air pollution legislation was the rage of the seventies, and it cost a wide range of industries a bundle in pollution control spending. Currently, however, carbon monoxide and lead emissions are down more than 60% from 1975, according to the Environmental Protection Agency (EPA), and the issue has receded from the forefront of the environmentalist agenda. Many of the standards for water pollution set under the Clean Water Act have also been met by U.S. industry in past years (although many would argue there remains much to be done.) According to the EPA, in the 13 years since the bill was enacted, industrial wastewater pollutants have been cut by one-third.

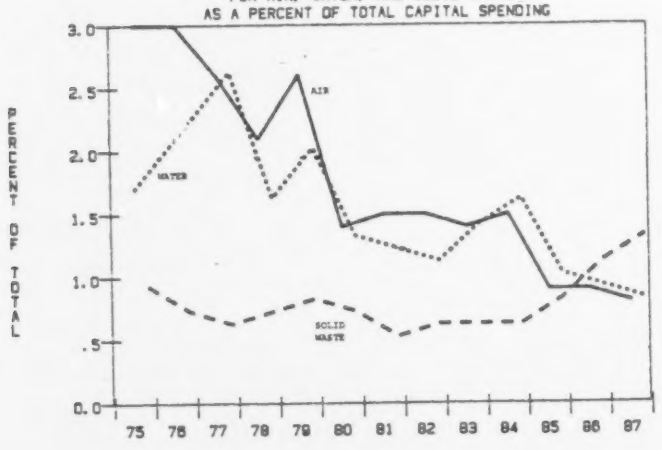
In the hot seat in place of water and air pollution issues are concerns about toxic waste and acid rain--problems that require a different approach to

pollution control. Superfund, for example, is a program implemented by the government to clean up toxic dump sites, but funded by chemical industry taxes. Here, the pollution control dollars are not spent by private industry and they are not reflected in the survey. To companies supplying pollution control equipment, however, the dollars are being spent nevertheless. Acid rain has also been on the hit list of environmentalists for years, but no legislation has yet been enacted to regulate the sulfer and nitrogen emissions said to cause acid rain simply because not enough is known about it. The Reagan administration, has, however, recently approved a five-year $5 billion U.S./Canadian joint venture program to test methods of controlling these emissions.

Air, Water, and Solid Waste Pollution Control

The changing composition of the pollution control picture can be seen most clearly in the shift from air pollution spending to solid waste pollution

CHART 3
POLLUTION CONTROL EXPENDITURES
FOR AIR, WATER, AND SOLID WASTE
AS A PERCENT OF TOTAL CAPITAL SPENDING



control (Chart 3). As a percentage of total capital spending, expenditures for air pollution control peaked in 1977. After that, however, such spending went downhill quickly. Consider this: In 1975-76, air pollution control spending accounted for 3% of total capital spending by U.S. business. In 1985, that figure was down to 0.9% (Table IV).

Purchases of anti-air pollution devices in dollar terms peaked at $5.2 billion in 1984 before plummeting more than 30% to $3.4 billion in 1985.

Spending on water pollution control as a percent of total capital spending has also run off in recent years. U.S. business' spending to control water pollution fell 8.3% in 1985 and is projected by the survey to dip again in 1986.

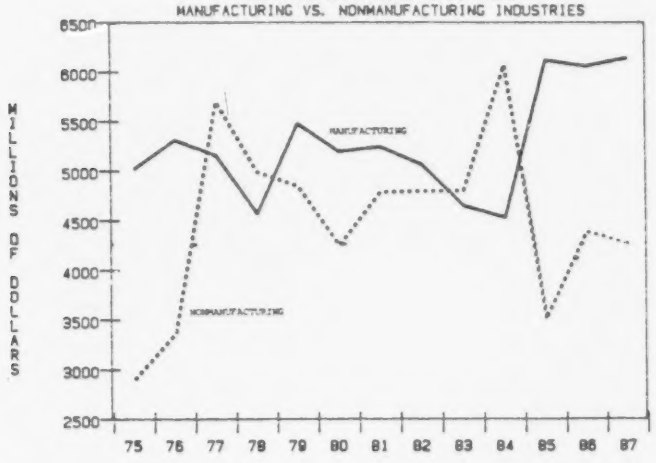
Pollution control spending on solid waste disposal, on the other hand, has been growing rapidly over the past few years. From 1981 through 1985, capital spending on anti-solid waste pollution by U.S business grew at an annual rate of 21%. Compare that to the 9% annual rate of decline in air pollution control spending and the 3% annual rate of decline of spending on water pollution over the same period. What's more, according to the survey, U.S. business is planning even bigger increases for solid waste disposal expenditures over the next few years. Projected are a 32% boom in anti-solid waste pollution control spending for 1986 and another 20% increase for 1987. In fact, if predictions pan out, solid waste disposal will be the primary focus of pollution control spending in 1986 for the first time on record (Table III).

Industry and Sector Spending

When it comes to pollution control, the spending patterns of manufacturing

and nonmanufacturing sectors of U.S. business are polar opposites. For example, for 1986, nonmanufacturing firms plan to boost pollution control spending 25% to $4.4 billion while manufacturing industries have slated their spending for a 1% cut to $6.1 billion (Chart 4). Compare that to 1985 when nonmanufacturing firms slashed pollution control capital spending 43% while manufacturers boosted spending 32%.

CHART 4
POLLUTION CONTROL EXPENDITURES,
MANUFACTURING VS. NONMANUFACTURING INDUSTRIES



The most influential factors in these volatile gyrations are four industries that accounted for 55% of all pollution control expenditures in 1985. Upsetting electric utilities for the number one spender spot in 1985 were petroleum companies, who, with a 30% increase in expenditures accounted for 19% of total pollution control purchases by U.S industry in 1985. With sales and profits on the skids, however, the petroluem industry is planning hefty cutbacks in both pollution control spending (-30%) and overall capital spending (-23%) for 1986.

Before crashing 55% in 1985, electric utilities absorbed more than 30% of U.S. business' total pollution control bill. In 1985, the share was down to 15%--only a fraction of its historical level. What's more, if survey plans

materialize, electric utilites will slash pollution control spending 12% in 1986 and another 25% in 1987. There are several reasons for the momentous decline in the purchasing plans of pollution control's largest market. For one thing, capacity additions in the electric utility industry have been negligible over the past five years due to slow demand growth. Instead, many utilities are investing heavily to extend the lives of older generating plants--plants that are not required to comply with the strict emission standards of the Clean Air Act. With the weakness in demand growth expected to continue, it may very well be some time before the electric utility industry makes a comeback as the largest purchaser of pollution control equipment.

Much of the boom expected in nonmanufacturing industry spending on pollution control for 1986 can be attributed to trade and services--a huge and diverse group of industries that plan to boost pollution control spending 66%, primarily to control solid waste pollution. With these vigorous spending increases, trade and services will account for 21% of total pollution control spending in 1986 compared to 14% in 1985.

The smallest of the large pollution control spenders in 1985 was the chemical industry, accounting for just over 8% of the total. Chemical firms, seeing no new federal pollution control laws enacted in the wake of Bhopal, only plan to raise pollution control capital spending 2.8% in 1986 following last year's lackluster 3.1% increase. Following this lull in spending growth, however, the industry anticipates a huge 20% boom in pollution control spending in 1987, the bulk of which will go to solid waste disposal.

Of the industries that account for the other 45% of pollution control spending by U.S. business, the largest increases in spending predicted for 1986 are in iron and steel (42.6%), fabricated metals (42.2%), food and beverages (44.3%), and mining (34%). On the downside, railroads plan a 68% slash in spending while nonferrous metals and electrical machinery firms expect to cut expenditures 11.4% and 15.4% respectively.

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NOTE: The other durables category listed in the tables includes lumber, furniture, jewelry, toys, and transportation equipment other than autos ans aerospace. Other nondurables includes apparel, tobacco, printing and publishing, and leather.

TABLE I

INVESTMENT FOR POLLUTION CONTROL
(Millions of Dollars)

INDUSTRY	Actual 1985	Planned 1986	% Change 1985-86	Planned 1987
Iron & Steel	157	224	42.6	144
Nonferrous Metals	168	149	-11.4	165
Electrical Machinery	464	392	-15.4	383
Non-Electrical Machinery	327	368	12.7	494
Autos,Trucks & Parts	435	561	28.9	565
Aerospace	162	198	22.1	152
Fabricated Metals	135	191	42.2	117
Instruments	112	113	0.8	124
Stone,Clay & Glass	149	173	16.6	158
Other Durables	411	508	23.5	693
TOTAL DURABLES	2,518	2,877	14.2	2,996
Chemicals	805	827	2.8	989
Paper & Pulp	570	568	-0.3	632
Rubber & Plastic	134	160	19.5	129
Petroleum	1,830	1,281	-30.0	1,255
Food & Beverage	198	286	44.3	94
Textiles	64	59	-6.9	48
Other Nondurables	0	0	NC	0
TOTAL NONDURABLES	3,601	3,182	-11.6	3,146
ALL MANUFACTURING	6,119	6,059	-1.0	6,142
Mining	442	593	34.0	466
Railroads	21	7	-68.4	6
Airlines	53	58	9.1	5
Other Transportation	135	135	0.1	149
Electric Utilities	1,422	1,254	-11.8	942
Gas Utilities	64	78	22.2	111
Communications	61	92	52.0	253
Trade & Services	1,293	2,151	66.3	2,320
ALL NONMANUFACTURING	3,490	4,367	25.1	4,251
ALL BUSINESS	9,609	10,426	8.5	10,393

TABLE II

POLLUTION CONTROL AS A
PERCENT OF CAPITAL SPENDING

INDUSTRY	Actual 1985	Planned 1986	Planned 1987
Iron & Steel	3.8	5.4	2.8
Nonferrous Metals	8.9	7.0	7.3
Electrical Machinery	3.0	2.9	2.6
Non-Electrical Machinery	2.0	2.2	3.2
Autos,Trucks & Parts	3.0	3.7	4.2
Aerospace	4.7	4.4	3.7
Fabricated Metals	3.8	4.8	3.3
Instruments	3.0	2.8	3.4
Stone,Clay & Glass	4.4	5.3	4.6
Other Durables	5.9	6.7	8.7
TOTAL DURABLES	3.4	3.9	4.1
Chemicals	4.9	4.9	5.7
Paper & Pulp	6.7	6.2	7.8
Rubber & Plastic	3.5	4.1	3.7
Petroleum	6.9	6.3	6.4
Food & Beverage	1.9	2.8	0.9
Textiles	3.6	3.5	2.8
Other Nondurables	0.0	0.0	0.0
TOTAL NONDURABLES	4.5	4.2	4.3
ALL MANUFACTURING	4.0	4.0	4.2
Mining	2.8	4.2	2.9
Railroads	0.3	0.1	0.1
Airlines	1.1	1.2	0.1
Other Transportation	2.2	2.2	2.3
Electric Utilities	3.9	3.7	3.0
Gas Utilities	0.5	0.5	0.7
Communications	0.2	0.3	0.8
Trade & Services	1.1	1.7	1.9
ALL NONMANUFACTURING	1.5	1.9	1.8
ALL BUSINESS	2.5	2.7	2.7

TABLE III
POLLUTION CONTROL EXPENDITURE: AIR, WATER, AND SOLID WASTE
(Millions of Dollars)

INDUSTRY	ACTUAL 1985			PLANNED 1986			% CHANGE 1985-86			PLANNED 1987		
	Air	Water	Solid Waste	Air	Water	Solid Waste	Air	Water	Solid Waste	Air	Water	Solid Waste
Iron & Steel	50	87	19	75	115	34	49	31	75	26	95	23
Nonferrous Metals	93	37	37	63	43	42	-32	15	13	55	55	55
Electrical Machinery	131	201	132	132	115	145	1	-43	10	138	135	111
Non-Electrical Machinery	92	91	143	71	121	176	-23	32	23	68	83	344
Autos,Trucks & Parts	223	84	129	237	111	214	6	33	66	161	135	269
Aerospace	57	49	57	65	65	69	14	32	21	48	43	55
Fabricated Metals	47	49	39	76	73	42	59	51	10	43	45	28
Instruments	65	45	2	60	50	2	-8	13	13	71	52	1
Stone,Clay & Glass	57	47	44	72	52	50	25	9	14	64	44	50
Other Durables	133	133	145	166	170	172	25	28	18	170	172	351
TOTAL DURABLES	949	823	746	1,016	915	946	7	11	27	844	864	1,288
Chemicals	233	334	238	221	334	272	-5	0	14	248	366	374
Paper & Pulp	166	220	184	211	160	197	27	-27	7	286	175	171
Rubber & Plastic	59	37	37	89	33	38	51	-12	2	62	31	35
Petroleum	841	616	373	383	576	322	-54	-6	-14	433	423	399
Food & Beverage	61	80	58	77	134	75	27	68	30	30	34	30
Textiles	54	4	6	43	10	7	-21	174	14	35	4	9
Other Nondurables	0	0	0	0	0	0	NC	NC	NC	0	0	0
TOTAL NONDURABLES	1,414	1,291	896	1,024	1,247	911	-28	-3	2	1,095	1,033	1,019
ALL MANUFACTURING	2,363	2,114	1,642	2,040	2,163	1,856	-14	2	13	1,938	1,897	2,307
Mining	184	203	55	194	328	70	6	62	27	215	111	140
Railroads	0	20	0	0	6	0	-25	-70	-25	0	6	0
Airlines	21	17	14	21	19	19	-3	8	28	5	0	0
Other Transportation	45	45	45	45	45	45	0	0	0	50	50	50
Electric Utilities	585	669	168	758	311	186	30	-54	11	555	237	149
Gas Utilities	0	7	57	0	6	71	NC	-7	26	0	9	102
Communications	61	0	0	92	0	0	52	NC	NC	253	0	0
Trade & Services	172	234	887	275	342	1,535	60	46	73	199	344	1,777
ALL NONMANUFACTURING	1,068	1,195	1,228	1,385	1,056	1,926	30	-12	57	1,276	756	2,218
ALL BUSINESS	3,431	3,309	2,870	3,424	3,219	3,783	0	-3	32	3,215	2,653	4,525

TABLE IV
POLLUTION CONTROL EXPENDITURE: AIR, WATER, AND SOLID WASTE
(Percent of Capital Spending)

INDUSTRY	ACTUAL 1985			PLANNED 1986			PLANNED 1987		
	Air	Water	Solid Waste	Air	Water	Solid Waste	Air	Water	Solid Waste
Iron & Steel	1.2	2.1	0.5	1.8	2.8	0.8	0.5	1.8	0.4
Nonferrous Metals	4.9	2.0	2.0	3.0	2.0	2.0	2.4	2.4	2.4
Electrical Machinery	0.8	1.3	0.8	1.0	0.9	1.1	0.9	0.9	0.8
Non-Electrical Machinery	0.6	0.6	0.9	0.4	0.7	1.1	0.4	0.5	2.2
Autos,Trucks & Parts	1.5	0.6	0.9	1.6	0.7	1.4	1.2	1.0	2.0
Aerospace	1.6	1.4	1.6	1.4	1.4	1.5	1.2	1.2	1.4
Fabricated Metals	1.3	1.4	1.1	1.9	1.9	1.1	1.2	1.3	0.8
Instruments	1.8	1.2	0.0	1.5	1.3	0.1	1.9	1.4	0.0
Stone,Clay & Glass	1.7	1.4	1.3	2.2	1.6	1.5	1.9	1.3	1.4
Other Durables	1.9	1.9	2.1	2.2	2.2	2.3	2.1	2.2	4.4
TOTAL DURABLES	1.3	1.1	1.0	1.4	1.2	1.3	1.1	1.2	1.7
Chemicals	1.4	2.0	1.4	1.3	2.0	1.6	1.4	2.1	2.1
Paper & Pulp	1.9	2.6	2.2	2.3	1.7	2.1	3.5	2.1	2.1
Rubber & Plastic	1.6	1.0	1.0	2.3	0.8	1.0	1.8	0.9	1.0
Petroleum	3.2	2.3	1.4	1.9	2.8	1.6	2.2	2.1	2.0
Food & Beverage	0.6	0.8	0.6	0.8	1.3	0.7	0.3	0.3	0.3
Textiles	3.0	0.2	0.3	2.5	0.6	0.4	2.1	0.2	0.5
Other Nondurables	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TOTAL NONDURABLES	1.8	1.6	1.1	1.4	1.7	1.2	1.5	1.4	1.4
ALL MANUFACTURING	1.5	1.4	1.1	1.4	1.4	1.2	1.3	1.3	1.6
Mining	1.2	1.3	0.3	1.4	2.3	0.5	1.4	0.7	0.9
Railroads	0.0	0.3	0.0	0.0	0.1	0.0	0.0	0.1	0.0
Airlines	0.4	0.4	0.3	0.4	0.4	0.4	0.1	0.0	0.0
Other Transportation	0.7	0.7	0.7	0.7	0.7	0.7	0.8	0.8	0.8
Electric Utilities	1.6	1.9	0.5	2.2	0.9	0.5	1.8	0.8	0.5
Gas Utilities	0.0	0.1	0.5	0.0	0.0	0.5	0.0	0.1	0.6
Communications	0.2	0.0	0.0	0.3	0.0	0.0	0.8	0.0	0.0
Trade & Services	0.1	0.2	0.7	0.2	0.3	1.2	0.2	0.3	1.5
ALL NONMANUFACTURING	0.5	0.5	0.5	0.6	0.4	0.8	0.5	0.3	1.0
ALL BUSINESS	0.9	0.9	0.7	0.9	0.8	1.0	0.8	0.7	1.2

TABLE V

TOTAL POLLUTION CONTROL EXPENDITURES---HISTORICAL
(MILLIONS OF DOLLARS)

INDUSTRY	1967	1968	1969	1970	1971	1972	1973	1974
Iron & Steel	114	105	153	167	162	132	147	183
Nonferrous Metals	44	16	39	95	104	148	220	499
Electrical Machinery	31	95	52	80	70	79	129	87
Non-Electrical Machinery	30	61	54	132	107	123	166	210
Autos,Trucks & Parts	114	53	99	128	162	198	429	455
Aerospace	13	23	35	25	30	42	81	24
Fabricated Metals	26	46	47	51	85	104	130	108
Instruments	6	15	32	30	73	28	32	57
Stone,Clay & Glass	46	42	66	68	124	128	141	290
Other Durables	80	94	178	247	149	134	231	345
TOTAL DURABLES	499	556	739	1,024	1,066	1,116	1,707	2,259
Chemicals	92	109	135	165	268	368	425	452
Paper & Pulp	90	79	147	161	266	339	454	478
Rubber & Plastic	7	10	9	50	43	60	97	48
Petroleum	97	159	242	309	469	513	586	507
Food & Beverage	41	22	61	103	127	170	236	566
Textiles	8	11	14	18	30	28	36	57
Other Nondurables	61	28	49	104	20	110	81	59
TOTAL NONDURABLES	389	418	652	911	1,223	1,588	1,914	2,167
ALL MANUFACTURING	903	970	1,415	1,935	2,289	2,704	3,621	4,426
Mining	55	49	99	107	75	147	254	321
Railroads	NA	NA	NA	40	29	38	64	69
Airlines	NA	NA	NA	18	9	46	176	165
Electric Utilities	146	231	154	401	540	1,074	1,145	1,197
Gas Utilities	81	25	130	108	48	43	44	68
Communication & Other	0	0	0	0	0	182	330	873
Trade & Services	0	0	0	134	319	353	456	702
ALL NONMANUFACTURING	243	220	297	808	1,021	1,882	2,469	3,396
ALL BUSINESS	1,018	1,070	1,543	2,743	3,310	4,587	6,090	7,822

TABLE V (Continued)

TOTAL POLLUTION CONTROL EXPENDITURES---HISTORICAL
(MILLIONS OF DOLLARS)

INDUSTRY	1975	1976	1977	1978	1979	1980	1981	1982
Iron & Steel	459	638	481	450	638	526	452	314
Nonferrous Metals	473	289	377	175	125	168	169	153
Electrical Machinery	129	173	125	200	219	195	137	242
Non-Electrical Machinery	112	222	419	289	224	194	369	202
Autos,Trucks & Parts	190	173	221	309	700	694	147	16
Aerospace	55	48	36	51	30	18	71	68
Fabricated Metals	211	246	142	153	123	113	69	52
Instruments	58	62	41	65	95	73	128	96
Stone,Clay & Glass	294	172	168	268	144	199	170	90
Other Durables	257	252	228	278	367	315	479	211
TOTAL DURABLES	2,239	2,275	2,238	2,239	2,664	2,497	2,192	1,445
Chemicals	634	907	772	597	677	884	878	911
Paper & Pulp	641	769	453	300	414	443	299	291
Rubber & Plastic	58	78	208	133	153	59	78	97
Petroleum	1,162	751	981	711	1,082	822	1,325	1,267
Food & Beverage	232	393	297	412	239	221	389	595
Textiles	76	123	71	103	125	81	81	69
Other Nondurables	35	64	173	127	156	210	74	457
TOTAL NONDURABLES	2,838	3,086	2,955	2,383	2,846	2,720	3,124	3,687
ALL MANUFACTURING	5,077	5,360	5,193	4,622	5,510	5,217	5,317	5,132
Mining	502	526	1,717	1,201	192	224	1,262	722
Railroads	78	47	84	83	99	262	119	229
Airlines	21	20	37	31	111	83	0	159
Electric Utilities	1,542	1,776	2,464	2,273	3,075	2,795	3,195	3,105
Gas Utilities	43	126	170	75	40	0	0	9
Communication & Other	244	291	411	245	251	60	129	155
Trade & Services	475	580	820	1,082	1,080	828	83	418
ALL NONMANUFACTURING	2,904	3,366	5,702	4,990	4,848	4,251	4,789	4,797
ALL BUSINESS	7,981	8,727	10,895	9,613	10,358	9,468	10,106	9,929

TABLE V (Continued)

TOTAL POLLUTION CONTROL EXPENDITURES---HISTORICAL
(MILLIONS OF DOLLARS)

INDUSTRY	1983	1984
Iron & Steel	192	184
Nonferrous Metals	154	181
Electrical Machinery	114	161
Non-Electrical Machinery	419	385
Autos,Trucks & Parts	73	246
Aerospace	55	111
Fabricated Metals	107	144
Instruments	58	85
Stone,Clay & Glass	297	114
Other Durables	102	167
TOTAL DURABLES	1,571	1,779
Chemicals	635	781
Paper & Pulp	397	296
Rubber & Plastic	22	134
Petroleum	1,365	1,404
Food & Beverage	241	229
Textiles	57	21
Other Nondurables	419	0
TOTAL NONDURABLES	3,137	2,865
ALL MANUFACTURING	4,707	4,644
Mining	91	1,180
Railroads	112	48
Airlines	9	32
Electric Utilities	3,876	3,258
Gas Utilities	92	52
Communication & Other	173	0
Trade & Services	452	1,503
ALL NONMANUFACTURING	4,805	6,073
ALL BUSINESS	9,512	10,717

TABLE VI

TOTAL POLLUTION CONTROL EXPENDITURES---HISTORICAL
(PERCENT OF TOTAL CAPITAL SPENDING)

INDUSTRY	1967	1968	1969	1970	1971	1972	1973	1974	1975
Iron & Steel	6.0	5.2	8.4	10.3	12.8	12.3	11.7	9.3	14.9
Nonferrous Metals	4.0	1.4	3.7	8.1	10.2	15.3	18.0	28.3	27.6
Electrical Machinery	1.0	3.0	1.6	2.3	2.3	2.8	3.7	2.3	4.2
Non-Electrical Machinery	1.0	2.1	1.5	3.5	3.4	3.8	4.2	4.1	2.3
Autos,Trucks & Parts	4.0	2.0	3.3	4.2	6.7	6.6	11.2	10.6	5.7
Aerospace	1.0	1.9	2.7	2.8	4.8	6.1	10.2	2.0	4.6
Fabricated Metals	2.0	3.4	3.5	4.2	7.1	7.3	7.2	5.6	10.8
Instruments	0.9	2.0	3.5	3.5	9.1	3.2	2.8	4.8	5.5
Stone,Clay & Glass	5.0	4.7	5.9	6.4	13.2	9.6	8.9	17.5	17.6
Other Durables	4.9	5.0	7.0	9.3	6.4	4.8	6.5	9.0	7.5
TOTAL DURABLES	2.8	3.1	3.7	5.0	6.3	6.0	7.5	8.4	8.8
Chemicals	3.0	3.9	4.5	4.9	8.2	10.9	10.2	7.3	8.9
Paper & Pulp	6.0	6.2	9.1	9.3	20.7	23.3	22.8	16.6	21.9
Rubber & Plastic	1.0	1.0	0.8	5.4	5.4	5.8	6.2	3.0	4.8
Petroleum	2.0	3.2	4.6	6.0	9.0	10.7	12.7	7.2	12.8
Food & Beverage	2.0	1.0	2.2	3.1	3.8	5.2	6.3	13.3	5.3
Textiles	1.0	1.7	1.6	2.3	3.3	2.6	3.5	5.4	8.9
Other Nondurables	4.0	1.8	2.8	5.5	1.0	5.0	3.1	2.2	1.3
TOTAL NONDURABLES	2.7	2.9	4.0	5.2	7.3	9.2	9.8	8.5	10.3
ALL MANUFACTURING	2.8	3.0	3.9	5.1	6.8	7.6	8.5	8.5	9.6
Mining	4.0	3.4	5.6	5.3	2.8	5.1	7.7	7.0	8.2
Railroads	NA	NA	NA	1.6	1.2	1.6	2.2	1.9	2.0
Airlines	NA	NA	NA	0.7	0.7	2.4	9.3	9.2	1.4
Electric Utilities	2.0	2.9	1.7	3.8	4.4	7.9	7.6	7.1	9.1
Gas Utilities	4.0	1.0	4.9	4.4	2.0	1.6	1.5	2.2	1.3
Communication & Other	0.0	0.0	0.0	0.0	0.0	1.2	2.0	4.8	1.4
Trade & Services	0.0	0.0	0.0	0.6	1.3	1.2	1.3	1.8	1.2
ALL NONMANUFACTURING	0.6	0.5	0.6	1.3	1.7	2.4	2.9	3.8	3.3
ALL BUSINESS	1.4	1.4	1.8	2.6	3.2	3.9	4.6	5.3	5.5

TABLE VI (Continued)

TOTAL POLLUTION CONTROL EXPENDITURES---HISTORICAL
(PERCENT OF TOTAL CAPITAL SPENDING)

INDUSTRY	1976	1977	1978	1979	1980	1981	1982	1983	1984
Iron & Steel	20.4	16.7	17.3	19.9	15.3	13.0	8.3	5.9	5.2
Nonferrous Metals	20.4	29.1	12.0	7.6	7.9	6.7	8.1	8.9	8.5
Electrical Machinery	4.8	2.7	3.4	2.9	2.0	1.3	2.2	1.0	1.1
Non-Electrical Machinery	4.1	6.6	3.9	2.2	1.7	2.7	1.5	3.1	2.5
Autos,Trucks & Parts	4.8	3.8	4.3	8.4	7.7	1.5	0.2	1.0	2.2
Aerospace	4.7	3.2	2.9	1.1	0.5	2.1	2.0	1.9	3.1
Fabricated Metals	11.2	5.8	5.2	3.8	3.4	1.9	1.7	3.8	4.2
Instruments	5.5	3.0	4.1	5.4	3.2	5.6	4.1	2.3	2.6
Stone,Clay & Glass	9.0	7.3	8.5	3.6	5.0	5.0	3.1	10.7	3.7
Other Durables	6.2	5.0	5.1	6.2	4.9	6.8	3.7	2.1	2.8
TOTAL DURABLES	8.3	7.1	5.6	5.0	4.1	3.5	2.6	3.1	2.7
Chemicals	12.3	10.5	7.7	6.9	7.6	6.7	7.2	4.9	5.1
Paper & Pulp	25.7	13.0	7.9	7.9	6.8	4.9	5.2	6.7	4.1
Rubber & Plastic	5.7	11.8	5.7	6.2	2.9	3.6	4.5	0.9	4.3
Petroleum	7.5	8.3	5.4	7.1	4.2	5.1	4.8	5.9	5.5
Food & Beverage	7.3	5.2	6.3	3.3	2.7	4.1	6.8	3.1	2.6
Textiles	12.6	6.0	7.9	8.8	5.3	4.9	4.7	3.7	1.1
Other Nondurables	2.2	5.1	3.0	2.6	2.8	0.9	5.5	4.5	0.0
TOTAL NONDURABLES	10.2	8.7	6.1	6.1	4.9	4.8	5.7	5.1	4.0
ALL MANUFACTURING	9.3	7.9	5.9	5.5	4.5	4.1	4.1	4.2	3.3
Mining	6.9	17.5	10.7	1.5	1.4	5.9	3.6	0.6	7.0
Railroads	1.1	1.8	1.6	1.5	3.7	1.9	4.3	2.3	0.7
Airlines	1.8	1.7	1.0	2.7	1.9	0.0	3.5	0.2	0.9
Electric Utilities	9.2	10.6	8.7	10.6	9.3	10.0	8.6	10.4	8.8
Gas Utilities	3.5	3.7	1.4	0.6	0.0	0.0	0.1	1.2	0.5
Communication & Other	1.5	1.9	1.0	0.9	0.2	0.4	0.5	0.6	0.0
Trade & Services	1.3	1.6	1.7	1.5	1.1	0.1	0.5	0.5	1.4
ALL NONMANUFACTURING	3.6	4.2	3.3	2.8	2.2	2.2	2.3	2.3	2.9
ALL BUSINESS	5.7	5.6	4.2	5.2	3.2	3.0	3.0	3.2	3.5

TABLE VII

HISTORICAL POLLUTION CONTROL EXPENDITURES
ON AIR,WATER, AND SOLID WASTE
(Millions of dollars)

	1970		1971		1972		1973		1974	
	AIR	WATER	AIR	WATER	AIR	WATER	AIR	WATER	AIR	WATER
Iron & Steel	70	98	83	78	71	61	65	81	106	77
Nonferrous Metals	77	19	77	26	123	25	187	33	344	155
Electrical Machinery	38	42	36	33	37	42	59	70	46	42
Non-Electrical Machinery	91	42	69	38	65	58	91	75	118	92
Autos,Trucks & Parts	85	43	102	61	117	81	237	192	253	202
Aerospace	15	10	22	8	24	18	49	32	16	8
Fabricated Metals	24	27	65	20	64	40	51	80	79	29
Instruments	22	9	30	42	10	18	21	12	29	29
Stone,Clay & Glass	41	27	94	30	80	48	94	48	182	108
Other Durables	106	141	68	82	98	36	156	75	222	123
TOTAL DURABLES	569	455	647	419	688	428	1,011	696	1,395	864
Chemicals	78	88	118	150	159	210	171	254	198	254
Paper & Pulp	62	99	126	140	182	157	295	159	282	196
Rubber & Plastic	31	18	20	23	30	30	70	27	21	27
Petroleum	139	170	250	219	340	173	374	212	352	155
Food & Beverage	47	56	54	74	82	88	123	112	140	425
Textiles	6	12	8	22	13	15	13	22	32	25
Other Nondurables	8	96	12	8	57	53	68	13	38	22
TOTAL NONDURABLES	371	540	587	636	863	725	1,114	800	1,063	1,104
ALL MANUFACTURING	940	994	1,234	1,055	1,551	1,154	2,125	1,496	2,458	1,968
Mining	69	38	35	40	98	49	195	59	202	119
Railroads	30	10	12	17	12	26	32	32	22	47
Airlines	15	3	9	0	43	4	176	0	155	11
Electric Utilities	254	148	319	221	857	218	799	347	725	472
Gas Utilities	74	34	27	22	24	19	23	20	40	28
Communication & Other	0	0	0	0	61	121	165	165	418	455
Trade & Services	67	67	196	123	206	147	386	70	429	273
ALL NONMANUFACTURING	508	300	598	422	1,299	583	1,775	694	1,991	1,405
ALL BUSINESS	1,448	1,294	1,832	1,477	2,850	1,737	3,900	2,190	4,449	3,373

TABLE VII (Continued)

HISTORICAL POLLUTION CONTROL EXPENDITURES
ON AIR,WATER, AND SOLID WASTE
(Millions of dollars)

	1975			1976			1977		
	AIR	WATER	SOLID WASTE	AIR	WATER	SOLID WASTE	AIR	WATER	SOLID WASTE
Iron & Steel	203	176	80	441	194	3	242	187	52
Nonferrous Metals	370	43	60	232	30	27	250	119	8
Electrical Machinery	37	68	25	43	97	32	46	46	32
Non-Electrical Machinery	49	53	10	130	76	16	197	197	25
Autos,Trucks & Parts	67	63	60	108	43	22	76	76	70
Aerospace	26	20	8	21	17	9	16	15	6
Fabricated Metals	98	102	12	92	145	9	96	44	2
Instruments	25	27	6	15	34	14	15	22	4
Stone,Clay & Glass	164	70	60	132	33	8	87	51	30
Other Durables	195	48	14	142	85	24	132	59	37
TOTAL DURABLES	1,234	670	335	1,357	754	164	1,157	815	266
Chemicals	242	306	85	265	545	96	250	463	59
Paper & Pulp	398	234	9	248	404	117	185	216	52
Rubber & Plastic	31	16	11	51	26	1	139	60	9
Petroleum	653	327	182	421	291	40	461	461	59
Food & Beverage	101	105	26	135	167	92	114	149	34
Textiles	25	40	11	24	82	17	31	28	12
Other Nondurables	27	8	0	26	26	12	27	122	24
TOTAL NONDURABLES	1,478	1,036	324	1,171	1,541	374	1,207	1,499	249
ALL MANUFACTURING	2,712	1,706	659	2,527	2,295	538	2,364	2,315	515
Mining	294	135	73	359	107	61	383	1,276	59
Railroads	16	54	8	9	34	4	9	56	19
Airlines	9	11	2	16	3	1	19	13	4
Electric Utilities	1,017	407	119	1,197	425	154	1,650	721	93
Gas Utilities	20	10	13	72	47	7	87	83	0
Communication & Other	70	105	70	39	194	58	260	130	22
Trade & Services	237	119	119	357	134	89	410	205	205
ALL NONMANUFACTURING	1,662	839	403	2,047	943	375	2,818	2,482	401
ALL BUSINESS	4,374	2,545	1,062	4,575	3,239	913	5,182	4,797	916

TABLE VII (Continued)

HISTORICAL POLLUTION CONTROL EXPENDITURES
ON AIR,WATER, AND SOLID WASTE

	1978			1979		
	AIR	WATER	SOLID WASTE	AIR	WATER	SOLID WASTE
Iron & Steel	294	154	3	475	164	0
Nonferrous Metals	140	19	16	59	36	30
Electrical Machinery	88	71	41	60	98	60
Non-Electrical Machinery	141	111	37	81	132	10
Autos,Trucks & Parts	295	7	7	233	233	233
Aerospace	30	12	9	8	13	8
Fabricated Metals	91	41	21	55	35	32
Instruments	40	21	5	35	33	26
Stone,Clay & Glass	136	73	60	80	44	20
Other Durables	131	55	93	118	118	130
TOTAL DURABLES	1,385	563	291	1,205	908	551
Chemicals	233	303	62	275	294	108
Paper & Pulp	148	148	4	189	147	79
Rubber & Plastic	100	12	21	84	37	32
Petroleum	303	316	92	594	427	61
Food & Beverage	144	177	92	94	102	44
Textiles	35	64	4	13	95	17
Other Nondurables	38	59	30	66	42	48
TOTAL NONDURABLES	1,001	1,078	304	1,314	1,143	388
ALL MANUFACTURING	2,386	1,641	595	2,520	2,052	939
Mining	539	269	393	64	64	64
Railroads	16	52	16	20	66	13
Airlines	19	9	3	66	29	17
Electric Utilities	1,254	941	78	1,886	1,044	145
Gas Utilities	27	38	11	7	33	0
Communication & Other	49	172	25	56	167	28
Trade & Services	573	255	255	504	288	288
ALL NONMANUFACTURING	2,476	1,735	780	2,602	1,692	555
ALL BUSINESS	4,862	3,376	1,375	5,122	3,743	1,493

TABLE VII (Continued)

HISTORICAL POLLUTION CONTROL EXPENDITURES
ON AIR,WATER, AND SOLID WASTE

	1980			1981			1982		
	AIR	WATER	SOLID WASTE	AIR	WATER	SOLID WASTE	AIR	WATER	SOLID WASTE
Iron & Steel	327	162	38	271	160	21	166	144	4
Nonferrous Metals	98	30	40	86	53	30	25	104	25
Electrical Machinery	78	68	49	42	85	11	55	143	44
Non-Electrical Machinery	68	126	0	192	164	14	94	94	13
Autos,Trucks & Parts	352	171	171	49	49	49	8	8	0
Aerospace	7	7	4	24	24	24	20	27	20
Fabricated Metals	37	67	10	11	36	22	12	31	9
Instruments	36	21	16	34	64	30	26	47	24
Stone,Clay & Glass	115	44	40	99	61	10	46	23	20
Other Durables	174	84	58	190	176	113	97	69	46
TOTAL DURABLES	1,293	779	426	998	872	322	550	690	205
Chemicals	291	396	198	236	459	184	418	329	165
Paper & Pulp	202	182	59	165	128	6	95	123	73
Rubber & Plastic	10	33	16	32	32	13	41	39	17
Petroleum	372	431	20	650	624	52	660	501	106
Food & Beverage	49	90	82	152	161	76	201	201	192
Textiles	34	28	20	32	37	13	34	25	10
Other Nondurables	75	68	68	25	25	25	308	75	75
TOTAL NONDURABLES	1,033	1,226	461	1,291	1,465	368	1,756	1,293	638
ALL MANUFACTURING	2,325	2,005	887	2,288	2,338	691	2,306	1,983	843
Mining	144	16	64	385	578	299	200	281	241
Railroads	7	106	149	50	44	25	37	155	37
Airlines	30	30	22	0	0	0	105	27	27
Electric Utilities	1,503	1,022	270	2,269	671	256	2,022	830	253
Gas Utilities	0	0	0	0	0	0	0	9	0
Communication & Other	30	30	0	32	97	0	62	62	31
Trade & Services	226	301	301	0	0	83	167	84	167
ALL NONMANUFACTURING	1,940	1,506	806	2,736	1,389	664	2,593	1,448	756
ALL BUSINESS	4,265	3,510	1,693	5,025	3,727	1,354	4,900	3,431	1,599

TABLE VII (CONTINUED)
HISTORICAL POLLUTION CONTROL EXPENDITURES
ON AIR,WATER, AND SOLID WASTE

	1983			1984		
	AIR	WATER	SOLID WASTE	AIR	WATER	SOLID WASTE
Iron & Steel	94	88	10	103	81	0
Nonferrous Metals	104	7	43	130	11	40
Electrical Machinery	46	46	23	44	73	44
Non-Electrical Machinery	108	203	108	92	200	92
Autos,Trucks & Parts	29	22	22	90	78	78
Aerospace	15	15	26	29	29	54
Fabricated Metals	34	65	8	62	65	17
Instruments	23	23	13	30	26	30
Stone,Clay & Glass	216	64	17	62	31	22
Other Durables	54	24	24	77	42	48
TOTAL DURABLES	722	555	294	718	637	425
Chemicals	181	259	194	306	276	199
Paper & Pulp	148	154	95	166	86	43
Rubber & Plastic	10	12	0	50	53	31
Petroleum	417	787	162	638	587	179
Food & Beverage	93	125	23	132	71	26
Textiles	25	23	9	17	4	0
Other Nondurables	251	84	84	0	0	0
TOTAL NONDURABLES	1,125	1,444	568	1,310	1,077	479
ALL MANUFACTURING	1,847	1,998	862	2,027	1,713	903
Mining	30	46	15	590	573	17
Railroads	10	93	10	34	7	7
Airlines	9	0	0	0	0	32
Electric Utilities	2,385	1,043	447	2,147	889	222
Gas Utilities	31	31	31	0	0	52
Communication & Other	115	29	29	0	0	0
Trade & Services	90	181	181	430	430	644
ALL NONMANUFACTURING	2,670	1,422	713	3,201	1,898	974
ALL BUSINESS	4,517	3,421	1,574	5,228	3,611	1,878

TABLE VIII

HISTORICAL PERCENTAGES OF POLLUTION EXPENDITURES
ON AIR,WATER, AND SOLID WASTE

	1970		1971		1972		1973		1974	
	AIR	WATER	AIR	WATER	AIR	WATER	AIR	WATER	AIR	WATER
Iron & Steel	4.3	6.0	6.6	6.2	6.6	5.7	5.2	6.5	5.4	3.9
Nonferrous Metals	6.5	1.6	7.6	2.6	12.7	2.6	15.3	2.7	19.5	8.8
Electrical Machinery	1.1	1.2	1.2	1.1	1.3	1.5	1.7	2.0	1.2	1.1
Non-Electrical Machinery	2.4	1.1	2.2	1.2	2.0	1.8	2.3	1.9	2.3	1.8
Autos,Trucks & Parts	2.8	1.4	4.2	2.5	3.9	2.7	6.2	5.0	5.9	4.7
Aerospace	1.7	1.1	3.5	1.3	3.5	2.6	6.2	4.0	1.3	0.7
Fabricated Metals	2.0	2.2	5.4	1.7	4.5	2.8	2.8	4.4	4.1	1.5
Instruments	2.5	1.0	3.8	5.3	1.1	2.1	1.8	1.0	2.4	2.4
Stone,Clay & Glass	3.9	2.5	10.0	3.2	6.0	3.6	5.9	3.0	11.0	6.5
Other Durables	4.0	5.3	2.9	3.5	3.5	1.3	4.4	2.1	5.8	3.2
TOTAL DURABLES	2.9	2.1	3.9	2.4	3.7	2.3	4.5	3.0	5.3	3.1
Chemicals	2.3	2.6	3.6	4.6	4.7	6.2	4.1	6.1	3.2	4.1
Paper & Pulp	3.6	5.7	9.8	10.9	12.5	10.8	14.8	8.0	9.8	6.8
Rubber & Plastic	3.4	2.0	2.5	2.9	2.9	2.9	4.5	1.7	1.3	1.7
Petroleum	2.7	3.3	4.8	4.2	7.1	3.6	8.1	4.6	5.0	2.2
Food & Beverage	1.4	1.7	1.6	2.2	2.5	2.7	3.3	3.0	3.3	10.0
Textiles	0.8	1.5	0.9	2.4	1.2	1.4	1.3	2.2	3.0	2.4
Other Nondurables	0.4	5.1	0.6	0.4	2.6	2.4	2.6	0.5	1.4	0.8
TOTAL NONDURABLES	2.1	3.1	3.5	3.8	5.0	4.2	5.7	4.1	4.2	4.3
ALL MANUFACTURING	2.5	2.6	3.7	3.1	4.4	3.2	5.0	3.5	4.8	3.7
Mining	3.4	1.9	1.3	1.5	3.4	1.7	5.9	1.8	4.4	2.6
Railroads	1.2	0.4	0.5	0.7	0.5	1.1	1.1	1.1	0.6	1.3
Airlines	0.6	0.1	0.7	0.0	2.2	0.2	9.3	0.0	8.6	0.6
Electric Utilities	2.4	1.4	2.6	1.8	6.3	1.6	5.3	2.3	4.3	2.8
Gas Utilities	3.0	1.4	1.1	0.9	0.9	0.7	0.8	0.7	1.3	0.9
Communication & Other	0.0	0.0	0.0	0.0	0.4	0.8	1.0	1.0	2.3	2.5
Trade & Services	0.3	0.3	0.8	0.5	0.7	0.5	1.1	0.2	1.1	0.7
ALL NONMANUFACTURING	0.8	0.5	1.0	0.7	1.6	0.8	2.1	0.8	2.2	1.6
ALL BUSINESS	1.4	1.2	1.8	1.4	2.4	1.5	3.0	1.6	3.0	2.3

TABLE VIII (Continued)

HISTORICAL PERCENTAGES OF POLLUTION EXPENDITURES
ON AIR,WATER, AND SOLID WASTE

	1975			1976			1977		
	AIR	WATER	SOLID WASTE	AIR	WATER	SOLID WASTE	AIR	WATER	SOLID WASTE
Iron & Steel	6.6	5.7	2.6	14.1	6.2	0.1	8.4	6.5	1.8
Nonferrous Metals	21.6	2.5	3.5	16.4	2.1	1.9	19.3	9.2	0.6
Electrical Machinery	1.2	2.2	0.8	1.2	2.7	0.9	1.0	1.0	0.7
Non-Electrical Machinery	1.0	1.1	0.2	2.4	1.4	0.3	3.1	3.1	0.4
Autos,Trucks & Parts	2.0	1.9	1.8	3.0	1.2	0.6	1.3	1.3	1.2
Aerospace	2.2	1.7	0.7	2.1	1.7	0.9	1.4	1.3	0.5
Fabricated Metals	5.0	5.2	0.6	4.2	6.6	0.4	3.9	1.8	0.1
Instruments	2.4	2.5	0.6	1.3	3.0	1.2	1.1	1.6	0.3
Stone,Clay & Glass	9.8	4.2	3.6	6.9	1.7	0.4	3.8	2.2	1.3
Other Durables	5.7	1.4	0.4	3.5	2.1	0.6	2.9	1.3	0.8
TOTAL DURABLES	4.9	2.6	1.3	5.0	2.6	0.7	3.7	2.6	0.8
Chemicals	3.4	4.3	1.2	3.6	7.4	1.3	3.4	6.3	0.8
Paper & Pulp	13.6	8.0	0.3	8.3	13.5	3.9	5.3	6.2	1.5
Rubber & Plastic	2.6	1.3	0.9	3.7	1.9	0.1	7.9	3.4	0.5
Petroleum	7.2	3.6	2.0	4.2	2.9	0.4	3.9	3.9	0.5
Food & Beverage	2.3	2.4	0.6	2.5	3.1	1.7	2.0	2.6	0.6
Textiles	2.9	4.7	1.3	2.5	8.4	1.7	2.6	2.4	1.0
Other Nondurables	1.0	0.3	0.0	0.9	0.9	0.4	0.8	3.6	0.7
TOTAL NONDURABLES	5.3	3.8	1.2	3.9	5.1	1.2	3.6	4.4	0.7
ALL MANUFACTURING	5.1	3.2	1.3	4.4	3.9	1.0	3.6	3.5	0.8
Mining	4.8	2.2	1.2	4.7	1.4	0.8	3.9	13.0	0.6
Railroads	0.4	1.4	0.2	0.2	0.8	0.1	0.2	1.2	0.4
Airlines	0.6	0.7	0.1	1.4	0.3	0.1	0.9	0.6	0.2
Electric Utilities	6.0	2.4	0.7	6.2	2.2	0.8	7.1	3.1	0.4
Gas Utilities	0.6	0.3	0.4	2.0	1.3	0.2	1.9	1.8	0.0
Communication & Other	0.4	0.6	0.4	0.2	1.0	0.3	1.2	0.6	0.1
Trade & Services	0.6	0.3	0.3	0.8	0.3	0.2	0.8	0.4	0.4
ALL NONMANUFACTURING	1.8	1.0	0.5	2.2	1.0	0.4	2.0	1.9	0.3
ALL BUSINESS	3.0	1.7	0.8	3.0	2.1	0.6	2.6	2.5	0.5

TABLE VIII (Continued)

HISTORICAL PERCENTAGES OF POLLUTION EXPENDITURES
ON AIR,WATER, AND SOLID WASTE

	1978			1979			1980		
	AIR	WATER	SOLID WASTE	AIR	WATER	SOLID WASTE	AIR	WATER	SOLID WASTE
Iron & Steel	11.3	5.9	0.1	14.8	5.1	0.0	9.5	4.7	1.1
Nonferrous Metals	9.6	1.3	1.1	3.6	2.2	1.8	4.6	1.4	1.9
Electrical Machinery	1.5	1.2	0.7	0.8	1.3	0.8	0.8	0.7	0.5
Non-Electrical Machinery	1.9	1.5	0.5	0.8	1.3	0.1	0.6	1.1	0.0
Autos,Trucks & Parts	4.1	0.1	0.1	2.8	2.8	2.8	3.9	1.9	1.9
Aerospace	1.7	0.7	0.5	0.3	0.5	0.3	0.2	0.2	0.1
Fabricated Metals	3.1	1.4	0.7	1.7	1.1	1.0	1.1	2.0	0.3
Instruments	2.5	1.3	0.3	2.0	1.9	1.5	1.6	0.9	0.7
Stone,Clay & Glass	4.3	2.3	1.9	2.0	1.1	0.5	2.9	1.1	1.0
Other Durables	2.4	1.0	1.7	2.0	2.0	2.2	2.7	1.3	0.9
TOTAL DURABLES	3.5	1.4	0.7	2.3	1.7	1.0	2.1	1.3	0.7
Chemicals	3.0	3.9	0.8	2.8	3.0	1.1	2.5	3.4	1.7
Paper & Pulp	3.9	3.9	0.1	3.6	2.8	1.5	3.1	2.8	0.9
Rubber & Plastic	4.3	0.5	0.9	3.4	1.5	1.3	0.5	1.6	0.8
Petroleum	2.3	2.4	0.7	3.9	2.8	0.4	1.9	2.2	0.1
Food & Beverage	2.2	2.7	1.4	1.3	1.4	0.6	0.6	1.1	1.0
Textiles	2.7	4.9	0.3	0.9	6.7	1.2	2.2	1.8	1.3
Other Nondurables	0.9	1.4	0.7	1.1	0.7	0.8	1.0	0.9	0.9
TOTAL NONDURABLES	2.6	2.8	0.7	2.8	2.5	0.8	1.9	2.2	0.8
ALL MANUFACTURING	3.1	2.1	0.7	2.5	2.1	0.9	2.0	1.7	0.8
Mining	4.8	2.4	3.5	0.5	0.5	0.5	0.9	0.1	0.4
Railroads	0.3	1.0	0.3	0.3	1.0	0.2	0.1	1.5	2.1
Airlines	0.6	0.3	0.1	1.6	0.7	0.4	0.7	0.7	0.5
Electric Utilities	4.8	3.6	0.3	6.5	3.6	0.5	5.0	3.4	0.9
Gas Utilities	0.5	0.7	0.2	0.1	0.5	0.0	0.0	0.0	0.0
Communication & Other	0.2	0.7	0.1	0.2	0.6	0.1	0.1	0.1	0.0
Trade & Services	0.9	0.4	0.4	0.7	0.4	0.4	0.3	0.4	0.4
ALL NONMANUFACTURING	1.6	1.2	0.5	1.5	1.0	0.3	1.0	0.8	0.4
ALL BUSINESS	2.1	1.5	0.6	2.6	1.9	0.7	1.4	1.2	0.6

TABLE VIII (Continued)

HISTORICAL PERCENTAGES OF POLLUTION EXPENDITURES
ON AIR,WATER, AND SOLID WASTE

	1981			1982			1983		
	AIR	WATER	SOLID WASTE	AIR	WATER	SOLID WASTE	AIR	WATER	SOLID WASTE
Iron & Steel	7.8	4.6	0.6	4.4	3.8	0.1	2.9	2.7	0.3
Nonferrous Metals	3.4	2.1	1.2	1.3	5.5	1.3	6.0	0.4	2.5
Electrical Machinery	0.4	0.8	0.1	0.5	1.3	0.4	0.4	0.4	0.2
Non-Electrical Machinery	1.4	1.2	0.1	0.7	0.7	0.1	0.8	1.5	0.8
Autos,Trucks & Parts	0.5	0.5	0.5	0.1	0.1	0.0	0.4	0.3	0.3
Aerospace	0.7	0.7	0.7	0.6	0.8	0.6	0.5	0.5	0.9
Fabricated Metals	0.3	1.0	0.6	0.4	1.0	0.3	1.2	2.3	0.3
Instruments	1.5	2.8	1.3	1.1	2.0	1.0	0.9	0.9	0.5
Stone,Clay & Glass	2.9	1.8	0.3	1.6	0.8	0.7	7.8	2.3	0.6
Other Durables	2.7	2.5	1.6	1.7	1.2	0.8	1.1	0.5	0.5
TOTAL DURABLES	1.6	1.4	0.5	0.9	1.3	0.4	1.4	1.1	0.6
Chemicals	1.8	3.5	1.4	3.3	2.6	1.3	1.4	2.0	1.5
Paper & Pulp	2.7	2.1	0.1	1.7	2.2	1.3	2.5	2.6	1.6
Rubber & Plastic	1.5	1.5	0.6	1.9	1.8	0.8	0.4	0.5	0.0
Petroleum	2.5	2.4	0.2	2.5	1.9	0.4	1.8	3.4	0.7
Food & Beverage	1.6	1.7	0.8	2.3	2.3	2.2	1.2	1.6	0.3
Textiles	1.9	2.2	0.8	2.3	1.7	0.7	1.6	1.5	0.6
Other Nondurables	0.3	0.3	0.3	3.7	0.9	0.9	2.7	0.9	0.9
TOTAL NONDURABLES	2.0	2.3	0.5	2.7	2.0	1.0	1.8	2.4	0.9
ALL MANUFACTURING	1.8	1.8	0.5	1.8	1.6	0.7	1.6	1.8	0.8
Mining	1.8	2.7	1.4	1.0	1.4	1.2	0.2	0.3	0.1
Railroads	0.8	0.7	0.4	0.7	2.9	0.7	0.2	1.9	0.2
Airlines	0.0	0.0	0.0	2.3	0.6	0.6	0.2	0.0	0.0
Electric Utilities	7.1	2.1	0.8	5.6	2.3	0.7	6.4	2.8	1.2
Gas Utilities	0.0	0.0	0.0	0.0	0.1	0.0	0.4	0.4	0.4
Communication & Other	0.1	0.3	0.0	0.2	0.2	0.1	0.4	0.1	0.1
Trade & Services	0.0	0.0	0.1	0.2	0.1	0.2	0.1	0.2	0.2
ALL NONMANUFACTURING	1.3	0.6	0.3	1.2	0.7	0.4	1.3	0.7	0.3
ALL BUSINESS	1.5	1.1	0.4	1.5	1.0	0.5	1.4	1.3	0.5

TABLE VIII (Continued)

HISTORICAL PERCENTAGES OF POLLUTION EXPENDITURES
ON AIR,WATER, AND SOLID WASTE

	1984		
	AIR	WATER	SOLID WASTE
Iron & Steel	2.9	2.3	0.0
Nonferrous Metals	6.1	0.5	1.9
Electrical Machinery	0.3	0.5	0.3
Non-Electrical Machinery	0.6	1.3	0.6
Autos,Trucks & Parts	0.8	0.7	0.7
Aerospace	0.8	0.8	1.5
Fabricated Metals	1.8	1.9	0.5
Instruments	0.9	0.8	0.9
Stone,Clay & Glass	2.0	1.0	0.7
Other Durables	1.3	0.7	0.8
TOTAL DURABLES	1.1	1.0	0.6
Chemicals	2.0	1.8	1.3
Paper & Pulp	2.3	1.2	0.6
Rubber & Plastic	1.6	1.7	1.0
Petroleum	2.5	2.3	0.7
Food & Beverage	1.5	0.8	0.3
Textiles	0.9	0.2	0.0
Other Nondurables	0.0	0.0	0.0
TOTAL NONDURABLES	1.8	1.5	0.7
ALL MANUFACTURING	1.5	1.2	0.6
Mining	3.5	3.4	0.1
Railroads	0.5	0.1	0.1
Airlines	0.0	0.0	0.9
Electric Utilities	5.8	2.4	0.6
Gas Utilities	0.0	0.0	0.5
Communication & Other	0.0	0.0	0.0
Trade & Services	0.4	0.4	0.6
ALL NONMANUFACTURING	1.5	0.9	0.5
ALL BUSINESS	1.5	1.5	0.5